



U.S. Department of Energy  
Energy Efficiency  
and Renewable Energy



# North American Equipment Upfitters, Inc.

*Specializing in Aerial Lifts and Fiberglass Bodies*

*And now CNG conversions!*

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President

Granite State Clean Cities and Manchester Community College  
“Green Your Fleet”  
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## North American Equipment Upfitters

- Founded in 1999 and based in Hooksett, NH (with locations in Syracuse, NY and Old Orchard Beach, ME)
  - Installation of Versalift booms and lifts onto trucks for the utility and telecommunications industries
  - Installation of Manitex booms and lifts for the construction industry
  - Distributor of American LaFrance fire apparatus
  - Servicer and repairer of all makes of lift and boom trucks
  - Distributor of TerraSolve – a biodegradeable oil and hydraulic fluid



## North American Equipment Upfitters

- Why are we entering the CNG industry?
  - To break our dependence on foreign oil and petroleum based products
  - To reduce our carbon footprint
  - To take advantage of a domestic resource, CNG.
  - We see a trend in the utility and telecommunication industries from gasoline- and diesel- to CNG-vehicles:  
Nationwide, ATT has committed to purchase 8,000 CNG vehicles over the next five years. One of our primary customers, Verizon, has commitment to deploy CNG vehicles in New England, New York, and New Jersey



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- Why Natural Gas...
  - **Cheaper** | 20-40% less than crude oil on an energy-equivalent basis
  - **Renewable** | Methane from landfills, stranded gas wells, agricultural operations and more can be converted into natural gas
  - **Reduces Greenhouse Gases** | NGVs reduce CO<sub>2</sub> emissions by 20-25%
  - **Domestic Resource** | Only 3% of US natural gas consumption comes from sources other than North America compared to 64% of oil imports in 2005
  - **Abundant** | 77-year time horizon of proven US natural gas reserves could be extended with technology
  - **Clean** | Only natural gas vehicles can meet EPA's stringent 2010 heavy-duty standards for NO<sub>x</sub> and soot today
  - **Bridge to Hydrogen** | Like H<sub>2</sub>, CH<sub>4</sub> is "lighter than air" and uses similar fueling systems



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## The Natural Gas Advantage

Source: Clean Energy, "Facts about fuels – Natural gas has the clear advantage."

2007-09 MY Engines	Diesel	Biodiesel	Ethanol	Natural Gas
Fuel Price	Baseline	More expensive	More expensive	Less expensive
Renewable	No	Yes	Yes	Yes
GHG Performance	Baseline	Better	Better	Better to Best
Meets US EPA 2010 truck standards	No	No	No	Yes
Abundant domestic resource	No	Land/water/transport constrained	Land/water/transport constrained	Yes
Lifecycle cost	Baseline	Worse	Worse	Best
Hydrogen bridge	No	No	No	Yes
Light-duty vehicles	Pending	Pending	Yes	Yes
Medium-duty vehicles	Yes	Yes	No	Yes
Heavy-duty vehicles	Yes	Yes	No	Yes





## North American Equipment Upfitters

- Who are we partnering with?
  - We are partnering with BAF Technologies of Dallas, TX for conversions

BAF is the premier supplier of CNG conversion kits in North American for Ford Motor Company products

A conversion will include installation of the conversion kit along with CNG fuel storage cylinders for a complete turnkey installation



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- What vehicles will be available?
  - Ford Crown Victoria
  - Ford F-150, F-250, and F-350 pickup trucks
  - Ford E-250 and E-350 cargo/passenger vans
  - Ford E-450 shuttle bus (cutaway) or cargo truck
  - Ford E-550 utility truck, cargo truck, or shuttle bus
  - Ford Transit Connect cargo truck, passenger van, or taxi version



## North American Equipment Upfitters

- What about warranty and service?
  - 3 years or 50,000 miles on major components
  - 8 years or 80,000 miles on CNG Emission-Related Components
  - OEM Warranty is NOT VOIDED after CNG upfit/conversion
- Vehicle Service
  - In-house warranty service program
  - Dealership service provider
  - Local retail service center
- Technical and Operator Training
  - On-site at NAEU
  - Classroom and hands-on





## North American Equipment Upfitters

- We're excited to now be a stakeholder and active participant in Granite State Clean Cities!

Thank you for your attention.

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